USSN: Art Unit: 10/693,263

3682

07/10/2007 AMENDMENT

Page: 2 of 7

## **CLAIM AMENDMENTS**

1	Claim 1 (original): A rotatable control rod mechanism, comprising:
2	(a) a rod having a spiral thread configuration;
3	(b) a spiral thread follower mounted on the rod for rotating the rod in
4	opposite directions when the spiral thread follower is translated along the rod in opposite
5	directions and gripped externally to prevent rotation thereof;
6	(c) a handle mounted over the spiral thread follower for rotation about the spiral
7	thread follower, the handle adapted for being gripped externally and moved in opposite directions
8	along the rod with the spiral thread follower, thereby allowing the spiral thread follower to be
9	rotated in opposite directions by the rod when the handle and spiral thread follower are translated
10	together along the rod and the spiral thread follower is not gripped; and
11	(d) the spiral thread follower further comprising a section which is exposed
12	relative to the handle to allow selectively gripping the spiral thread follower to selectively
13	prevent rotation thereof when the handle and the spiral thread follower are translated together
14	along the rod.
1	Claim 2 (currently amended): A rotatable control rod mechanism, comprising:
2	(a) a rotatable load;
3	(b) a rod having a spiral thread configuration;
4	(c) a connector connecting the rod to the load for rotating the load and rod
5	together;
6	(d) a spiral thread follower mounted on the rod for rotating along the rod
7	in opposite directions following the spiral thread configuration, the spiral thread follower
8	having a collar for receiving application of an external force applied to the collar to
9	prevent rotation of the spiral thread follower; and
10	(e) a handle mounted over and rotatably captured to the spiral thread
11	follower such that the handle and the spiral thread follower move together when one is
12	moved along the rod and the spiral thread follower freely rotates around the handle in the
13	absence of said external force, the handle being physically close proximate to and

1

2

USSN: 10/693.263 07/10/2007 AMENDMENT Art Unit: 3682 Page: 3 of 7 14 exposing the collar to application of said external force, whereby applying said external 15 force while moving the handle and spiral thread follower together in opposite directions 16 along the rod rotates the rod in opposite directions, and the absence of said external force 17 while moving the handle and spiral thread follower together in opposite directions along 18 the rod allows the rod to rotate the spiral thread follower in opposite directions. 1 Claim 3 (original): A plural stroke control rod mechanism, comprising: 2 (a) a rotatable shaft; 3 (b) a rod having spiral convolutions; 4 (c) a connector connecting the rod to the shaft for rotating the shaft and 5 rod together; and 6 (d) a handle device, comprising: 7 (1) a stepped cylinder comprising a first upper section or collar and a 8 second lower section or tube having a bottom end; the outer diameter of the collar 9 being of large dimension relative to the outer diameter of the tube; and the stepped 10 cylinder having a longitudinal axis and having an internal axially-extending bore mounting the stepped cylinder along the rod for rotation along the spiral 11 12 convolutions of the rod; 13 (2) a handle comprising a member having upper and lower ends, a 14 longitudinal axis and an axial bore therein extending to the upper and lower ends 15 thereof, the member rotatably mounting the tube of the stepped cylinder therein 16 with the relatively large diameter collar protruding from and rotatably seated along the upper end of the member; and 17 18 (3) the member and the collar comprising surfaces for gripping the member to move the handle device bidirectionally along the spiral rod and for gripping 19 the collar to selectively prevent rotation of the collar, thereby selectively preventing 20 21 rotation of the stepped cylinder and thereby selectively forcing rotation of the spiral rod 22 during such bidirectional movement.

Claim 4 (withdrawn): A method for reversibly and repeatedly rotating a rod having a

spiral thread configuration, a thread follower mounted on the rod and a handle rotatably

USSN:

3

4

5

6 7

8

9

10 11

1

2

3

4

5

6

7 8

9

10

11

12

13

1

2

3

4

10/693,263

Art Unit: 3682

07/10/2007 AMENDMENT

Page: 4 of 7

mounted over the spiral thread follower exposing a section of the spiral thread follower, the method comprising: first, engaging the exposed section to prevent rotation of the section and the spiral thread follower and translating the spiral thread follower along the rod in a first or a second direction of translation and thereby rotating the rod in a first or a second direction of rotation, respectively; and, second, engaging the handle to prevent rotation thereof while allowing rotation of the section and the spiral thread follower around the rod and translating the handle and the spiral thread follower along the rod in a first or a second direction of translation, thereby positioning the handle and the spiral thread follower for another first step.

Claim 5 (withdrawn): A method for reversibly and repeatedly rotating a rotatable load, comprising:

- (a) connecting to the load a rod having spiral convolutions;
- (b) mounting on the rod a spiral thread follower having a collar and a handle rotatably mounted along the spiral thread follower exposing the collar;
- (c) selectively engaging the collar to prevent rotation thereof and sliding the handle along the rod in a first direction of translation or a second, opposite direction of translation, thereby rotating the rod in a first direction of rotation or a second, opposite direction of rotation; and
- (d) selectively sliding the handle along the rod in the first or second direction of translation without engaging the collar sufficiently to prevent rotation thereof, thereby repositioning the handle along the rod in the first or second direction of translation without rotating the rod.

Claim 6 (previously presented): The control rod mechanism of claim 3:

- (4) the bottom end of the tube protruding from the lower end of the member; and
- (5) a retainer attached to the bottom end of the tube for rotatably capturing the member between the connector and the collar.